

CLAIMS:

1. A water treatment apparatus comprising a water inlet port, a water outlet port and a fluid flow path extending from the water inlet port to the water outlet port, a filtration member comprising at least two containers each of which contains sand and at least one of the containers is removable from the apparatus.
5
2. The water treatment apparatus as claimed in claim 1 wherein each of the containers is removable from the water treatment apparatus.
10
3. The water treatment apparatus as claimed in claim 1 wherein each of the containers is removable from the water treatment apparatus.
15
4. The water treatment apparatus as claimed in claim 1 wherein each of the containers is individually removable from the water treatment apparatus.
15
5. The water treatment apparatus as claimed in claim 1 wherein the containers are configured to define a top container and the top container is the at least one of the containers the is removable.
20
6. The water treatment apparatus as claimed in claim 1 wherein the containers are connected if flow communication that the water to be treated flows sequentially through the containers.
25
7. The water treatment apparatus as claimed in claim 1 wherein each of the containers that is removable has a water inlet port and a water outlet port and each of the containers that is removable include a water inlet port sealing member and a water outlet port sealing member.
30
8. The water treatment apparatus as claimed in claim 7 wherein the water inlet port sealing member and the water outlet port sealing member automatically seal the inlet and outlet ports when the container is removed from the apparatus.
9. The water treatment apparatus as claimed in claim 1 wherein the containers are configured to define a top container and the top container is provided with biological material in a cartridge which is openable.

10. The water treatment apparatus as claimed in claim 1 wherein biological material in a cartridge which is openable is provided in at least one container.
11. The water treatment apparatus as claimed in claim 1 wherein biological material to promote the formation of schmutzdecke is provided in at least one container.
12. A method of filtering a contaminated liquid with an apparatus comprising an upstream bed of sand which is contained in a first container and a downstream bed of sand which is contained in a second container, at least the first container is removable from the apparatus comprising causing the contaminated liquid to pass through the first container and subsequently causing the contaminated liquid to pass through the second container to obtain treated liquid.
13. The method as claimed in claim 12 further comprising subjecting the treated liquid to a further treatment step.
14. The method as claimed in claim 12 further comprising storing the treated liquid at atmospheric pressure in a storage vessel.
15. The method as claimed in claim 15 wherein the liquid is water and the method further comprises pumping the water from the storage vessel to a domestic water feed line.
16. A method of cleaning a sand filter of a water treatment apparatus comprising an upstream bed of sand which is contained in a first container and a downstream bed of sand which is contained in a second container comprising removing at least one of the containers from the apparatus to provide an open area in the apparatus for receiving a container and inserting a container in the open space.
17. The method as claimed in claim 16 further comprising cleaning the sand in the container removed from the apparatus and then reinserting the same container.
18. The method as claimed in claim 16 further comprising providing a container containing replacement sand.
19. The method as claimed in claim 16 further comprising sealing each container upon removal from the apparatus.

20. The method as claimed in claim 16 further comprising releasing biological material into a container which is placed in the apparatus.
21. The method as claimed in claim 16 further comprising promoting the formation of a schmutzdecke in a bed at least one of the beds of sand.
- 5 22. A water treatment apparatus comprising a water inlet port for receiving water at a pressure, a water outlet port and a fluid flow path extending from the water inlet port to the water outlet port, a filtration member comprising at least one bed of sand, a purification member downstream from the bed of sand and a storage vessel which is at a pressure less than the pressure at the water inlet port.
- 10 23. The water treatment apparatus as claimed in claim 22 wherein the storage vessel is at about atmospheric pressure.
24. The water treatment apparatus as claimed in claim 22 wherein further comprising a pump downstream from the storage vessel.
- 15 25. The water treatment apparatus as claimed in claim 22 wherein the bed of sand is provided in a plurality of containers, at least one of which is removable from the apparatus.
26. The water treatment apparatus as claimed in claim 22 wherein the containers that are removable from the apparatus are sealable.
- 20 27. The water treatment apparatus as claimed in claim 26 wherein at least one of the containers is provided with biological material to promote the formation of a schmutzdecke.
28. The water treatment apparatus as claimed in claim 26 further comprising a biological material to promote the formation of a schmutzdecke.
- 25 29. The water treatment apparatus as claimed in claim 22 wherein the purification step comprises at least one of ozonation, exposure to UV radiation or passing the water through a carbon filter.
30. The water treatment apparatus as claimed in claim 22 further comprising a sensor to determine the water level in the storage vessel and a valve drivenly connected to the sensor whereby the valve terminates the flow of water through the apparatus.
- 30 31. A water treatment apparatus comprising a water inlet port for receiving water at a pressure, a water outlet port and a fluid flow path extending

from the water inlet port to the water outlet port, a filtration member comprising at least one bed of sand, a purification member downstream from the bed of sand, a storage vessel, a sensor to determine the water level in the storage vessel and a valve drivenly connected to the sensor whereby the valve terminates the flow of water through the apparatus.

5

32. The water treatment apparatus as claimed in claim 31 wherein the sensor and the valve comprise a float valve.

33. The water treatment apparatus as claimed in claim 31 wherein the 10 purification member is positioned in the storage vessel.

34. The water treatment apparatus as claimed in claim 31 wherein the purification member is actuated by a second water level sensor.

35. The water treatment apparatus as claimed in claim 31 wherein the 15 purification member uses ozonation and an ozone generator is actuated by a second sensor to determine the water level in the storage vessel.